

Date:

Citizens Qualitative Habitat Evaluation Index

Vol ID: Site ID: River and Watershed:

CQHEI Total

I. Substrate (Bottom Type)

Score:

a) Size

- ☐ 14 pt Mostly Large (Fist Size or Bigger)
- ☐ 6 pt Mostly Small (Smaller Than Fingernail, but Still Coarse, or Bedrock)
- ☐ 10 pt Mostly Medium (Smaller than Fist, but Bigger than Fingernail)
- ☐ 0 pt Mostly Very Fine (Not Coarse, Sometimes Greasy or Mucky)

b) "Smothering"

- ☐ NO 5 pt Are Fist Size and Larger Pieces Smothered By Sands/Silts?
- ☐ YES 0 pt Symptoms: Hard to Move Large Pieces, Often Black on Bottom with Few Insects

c) "Silting"

- ☐ NO 5 pt Are Silts and Clays Distributed Throughout Stream?
- ☐ YES 0 pt Symptoms: Light Kicking of Bottom Results in Substantial Clouding of Stream for More than a Minute or Two

II. Fish Cover (Hiding Places) - Add 2 Points For Each One Present

Score:

- ☐ 2 pt Underwater Tree Roots (Large)
- ☐ 2 pt Boulders
- ☐ 2 pt Downed Trees, Logs, Branches
- ☐ 2 pt Water Plants
- ☐ 2 pt Undercut Banks
- ☐ 2 pt Underwater Tree Rootlets (Fine)
- ☐ 2 pt Backwaters, Oxbows or Side Channels
- ☐ 2 pt Shallow, Slow Areas for Small Fish
- ☐ 2 pt Deep Areas (Chest Deep)
- ☐ 2 pt Shrubs, Small Trees that Hang Close Over the Bank

III. Stream Shape and Human Alterations

Score:

a) "Curviness" or "Sinuosity" of Channel

- ☐ 8 pt 2 or More Good Bends
- ☐ 6 pt 1 or 2 Good Bends
- ☐ 3 pt Mostly Straight Some "Wiggle"
- ☐ 0 pt Very Straight

b) How Natural Is The Site?

- ☐ 12 pt Mostly Natural
- ☐ 6 pt Many Man-made Changes, but still some natural conditions left (e.g., trees, meanders)
- ☐ 9 pt A Few Minor Man-made Changes (e.g., a bridge, some streambank changes)
- ☐ 0 pt Heavy, Man-made Changes (e.g., leveed or channelized)

IV. Stream Forests & Wetlands (Riparian Area) & Erosion

Score:

a) Width of Riparian Forest & Wetland - Mostly:

- ☐ 8 pt Wide (Can't Throw A Rock Through/ Across It)
- ☐ 5 pt Narrow (Can Throw A Rock Through/ Across It)
- ☐ 0 pt None

b) Land Use - Mostly:

- ☐ 5 pt Forest/Wetland
- ☐ 2 pt Conservation Tillage
- ☐ 4 pt Shrubs
- ☐ 1 pt Suburban
- ☐ 3 pt Overgrown Fields
- ☐ 1 pt Row Crop
- ☐ 2 pt Fenced Pasture
- ☐ 0 pt Open Pasture
- ☐ 2 pt Park (Grass)
- ☐ 0 pt Urban/ Industrial

c) Bank Erosion - Typically:

- ☐ 4 pt Stable Hard or Well-Vegetated Banks
- ☐ 2 pt Combination of Stable and Eroding Banks
- ☐ 0 pt Raw, Collapsing Banks

d) How Much of Stream is Shaded?

- ☐ 3 pt Mostly
- ☐ 2 pt Partly
- ☐ 0 pt None

V. Depth & Velocity

Score:

a) Deepest Pool is At Least:

- ☐ 8 pt Chest Deep
- ☐ 4 pt Knee Deep
- ☐ 6 pt Waist Deep
- ☐ 0 pt Ankle Deep

b) Check ALL The Flow Types That You See (Add Points):

- ☐ 2 pt Very Fast: Hard to Stand in the Current
- ☐ 1 pt Moderate: Slowly Takes Objects Downstream
- ☐ 0 pt None
- ☐ 3 pt Fast: Quickly Takes Objects Downstream
- ☐ 1 pt Slow: Flow Nearly Absent

VI. Riffles/Runs (Areas Where Current is Fast/Turbulent, Surface May Be Broken)

Score:

a) Riffles/Runs Are:

- ☐ 8 pt Knee Deep or Deeper & Fast
- ☐ 4 pt Ankle Deep or Less & Slow
- ☐ 6 pt Ankle/Calf Deep & Fast
- ☐ 0 pt Do Not Exist

b) Riffle/Run Substrates Are:

- ☐ 7 pt Fist Size or Larger
- ☐ 0 pt Smaller Than Your Fingernails or Do Not Exist
- ☐ 6 pt Smaller Than Fist Size, but Larger Than Fingernail